

## CLAIMS

What is claimed is:

1. An apparatus for operating the blower of an automotive  
5 air conditioning system on a predetermined timed schedule  
following operation of the air conditioning system to remove  
condensate from the interior of the air conditioning system and  
thus to thwart attendant odors, the blower having a positive  
terminal and a negative terminal, said apparatus comprising:  
10 a first relay coupled to the positive terminal of the  
blower, said first relay, when activated, electrically  
connecting the positive terminal of the blower to the positive  
terminal of the automotive battery;  
a second relay coupled to the negative terminal of the  
15 blower, said second relay, when activated, electrically  
connecting the negative terminal of the blower to ground; and  
a logic circuit operatively coupled to said first and  
second relays, said logic circuit being configured to activate  
said first relay and said second relay on a predetermined time  
20 schedule when the automotive air conditioning system is turned  
off after having been operated to remove moisture from within  
the air conditioning system and thereby to eliminate an  
atmosphere therein that is conducive to the growth of micro-  
organisms that cause undesirable odor.

2. The apparatus of claim 1, wherein said first relay includes a battery pole connected to the positive terminal of the automotive said battery.

5 3. The apparatus of claim 2, wherein said first relay includes an accessory switch pole connected to the positive terminal of the automotive battery through an accessory switch.

10 4. The apparatus of claim 3, wherein said accessory switch pole is connected to said accessory switch through a blower control circuit of the air-conditioning system.

15 5. The apparatus of claim 1, wherein said second relay includes an unconnected pole.

6. The apparatus of claim 5, wherein said second relay includes a ground pole.

20 7. The apparatus of claim 1, wherein said logic circuit is connected to a temperature sensor for determining ambient temperature.

8. The apparatus of claim 1, wherein said logic circuit is connected to a battery voltage sensor for monitoring battery voltage.

5 9. The apparatus of claim 1, wherein said negative terminal of said blower motor is connected to ground through a blower control circuit of the air-conditioning system.

10 10. An air conditioning system for a vehicle comprising:  
a compressor coupled to an engine of the vehicle;  
an evaporator in flow communication with said  
compressor;

a refrigerant flowable through said compressor and  
said evaporator;

15 a blower cooperating with said evaporator, said blower including a blower control and a blower motor having a positive terminal and a negative terminal; and,

a circuit bypassing said blower control and an  
accessory switch of the vehicle and connecting said positive  
20 terminal of said blower motor to a positive terminal of a  
battery of the vehicle and connecting said negative terminal of  
said blower motor to ground on a predetermined time schedule  
when the air conditioning system is turned off after having been  
operated.

11. The air-conditioning system of claim 10, wherein said circuit includes a logic circuit.

5 12. The air-conditioning system of claim 11, wherein said logic circuit is connected to a temperature sensor.

13. The air-conditioning system of claim 11, wherein said logic circuit is connected to a battery voltage sensor.

10 14. The air-conditioning system of claim 10, wherein said circuit includes a first relay and a second relay.

15 15. The air-conditioning system of claim 14, wherein said first relay includes a battery pole connected to said positive terminal of said battery.

20 16. The air conditioning system of claim 14, wherein said first relay includes an accessory switch pole connected to said positive terminal of said battery by an accessory switch.

17. The air-conditioning system of claim 17, wherein said accessory switch pole is connected to said accessory switch through said blower control.

18. The air-conditioning system of claim 14, wherein said second relay includes an unconnected pole.

5 19. The air-conditioning system of claim 14, wherein said second relay includes a ground pole.

20. The air-conditioning system of claim 14, wherein said negative terminal of said blower motor is connected to ground  
10 through said blower control.

21. The air-conditioning system of claim 14, wherein said first relay and said second relay are connected to a logic circuit.

15 22. The air-conditioning system of claim 21, wherein said logic circuit is connected to a temperature sensor.

23. The air-conditioning system of claim 21, wherein said  
20 logic circuit is connected to a battery voltage sensor.

24. An apparatus for use with an air conditioning system of a vehicle to dry condensate from the heat exchanger of the air conditioning system in order to prevent propagation of

fungus and bacteria and resulting odors, said apparatus comprising:

a logic circuit connected to a battery voltage sensor and a temperature sensor;

5 a first relay connected to said logic circuit, to a positive terminal of a blower motor of the air conditioning system and through two connections to a positive terminal of a battery of the vehicle; and,

a second relay connected to said logic circuit, to a  
10 negative terminal of said blower motor, and through two connections to ground.

25. The apparatus of claim 24, wherein said two connections connecting said first relay to said positive  
15 terminal of said battery include a direct connection and an indirect connection through an accessory switch.

26. The apparatus of claim 25, wherein said indirect connection is also through a blower control.

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27. The apparatus of claim 24, wherein said two connections connecting said second relay to ground include a direct connection to ground and an indirect connection to ground through a blower control.

28. A method of drying condensate from the heat exchanger of a vehicle's air conditioning system to thwart the propagation of fungus and bacteria and its attendant odor, said method  
5 comprising the steps of:

determining that the engine has been switched off;

sensing the ambient temperature and determining that the air conditioning system of the vehicle was in operation prior to the engine being switched off if the sensed ambient  
10 temperature is greater than a predetermined threshold;

operating the blower of the vehicle's air conditioning system on a predetermined time schedule to draw air through the air conditioning system for drying condensate from interior surfaces thereof, wherein operating the blower includes  
15 bypassing the blower control of the blower.

29. The method of claim 28, wherein operating the blower includes connecting the positive terminal of the blower motor directly to the positive terminal of the vehicle's battery and  
20 connecting the negative terminal of the blower motor directly to ground.

30. A method of drying condensate from within an vehicle's air conditioning system to thwart the propagation of fungus and

bacteria and its attendant odor, the air conditioning system having a blower with a positive terminal and a negative terminal, said method comprising the steps of:

5 (a) determining that the engine of the vehicle has been shut off after having been operated;

(b) connecting the positive terminal of the blower directly to a positive voltage source from the vehicles battery and connecting the negative terminal of the blower directly to ground to operate the blower;.

10 (c) after a predetermined time, disconnecting at least one of the terminals of the blower that was connected in step (b) to discontinue operation of the blower;

(d) repeating steps (b) and (c) for a predetermined number of cycles, the cycled operation of the blower drawing condensate  
15 from within the air conditioning system to thwart the propagation of fungus and bacteria therein.

31. The method of claim 30 and wherein step (c) comprises disconnecting the positive terminal of the blower from the  
20 source of positive voltage and disconnecting the negative terminal of the blower from ground.

32. The method of claim 30 and wherein step (a) comprises monitoring the voltage level of the vehicle's battery and



determining that the engine has been shut off when the monitored voltage falls below a predetermined threshold after having been above the threshold.

5        33. The method of claim 30 and further comprising the step, in conjunction with step (a), of determining that the vehicle's air conditioning system was in operation prior to the engine being shut off before proceeding to step (b).

10        34. The method of claim 33 and wherein the step of determining that the vehicle's air condition system was in operation comprises sensing an ambient temperature and concluding that the air conditioning system was in operation if the sensed ambient temperature is above a predetermined  
15 threshold.

35. The method of claim 30 and wherein step (b) further includes disconnecting the positive terminal of the blower from its normal connection while it is connected directly to the  
20 positive voltage source and disconnecting the negative terminal of the blower from its normal connection while it is connected directly to ground.

36. The method of claim 35 and wherein the positive terminal's normal connection includes connection through a blower control circuit of the air conditioning system to a source of positive voltage from the vehicles battery.

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37. The method of claim 35 and wherein the negative terminal's normal connection includes connection through a blower control circuit of the air conditioning system to ground.